



## CANVA as a Digital Tool for Effective Student Learning Experience

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### ABSTRACT

In the current era of rapid technological advancements, educators are actively seeking appropriate digital multimedia tools to enhance students' learning experiences. Access to such resources is crucial for preparing students for the job market and ensuring their success. Digital note-taking has become a popular method of engagement, organizing, and composing comprehensible notes. The emergence of mobile technology has facilitated the shift from traditional note-taking to "digital note-taking." This study explores the effects of digital note-taking using CANVA, a popular digital tool, on students' academic achievement levels. CANVA for Education provides educators with a user-friendly platform for creating visually appealing and collaborative learning resources. It promotes project-based learning, enhances creativity and collaboration skills, and offers readily accessible features that contribute to a positive learning environment. This study aims to examine whether using CANVA significantly impacts students' performance compared to non-CANVA approaches. Additionally, it seeks to gather students' perspectives on the integration of CANVA for an effective learning experience. The study incorporates training, assistance, and feedback through questionnaires to evaluate the effectiveness of CANVA as a note-taking and teaching tool. The results show that the majority of students familiarized themselves with CANVA and preferred it over Microsoft PowerPoint for creating comprehensive and visually appealing notes. The findings suggest that CANVA enhances engagement, comprehension, and cognitive development during class activities, leading to positive learning outcomes. This study contributes to understanding the benefits of using CANVA as a digital tool for effective notetaking and teaching in classroom activities.

## 1. Introduction

During an era characterized by swift technological progress, educators are actively acquiring the expertise required to facilitate digitally-based multimedia learning. Research suggests that integrating multimedia elements, such as videos, graphics, and interactive content, in educational settings is of utmost importance. For instance, [1] conducted a meta-analysis and found that effective use of multimedia in learning enhances students' comprehension, memory retention, and application

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of knowledge. Ensuring access to such learning resources is of utmost importance, given that institutions aim to produce graduates who are well-prepared for the job market [2]. As a result, instructors must prioritize the cultivation of skills in their students that will be essential for future employment opportunities.

The emergence of mobile technology has led to a transition from traditional pen-and-paper note-taking to digital alternatives. Digital note-taking enables students to effectively capture, recall, organize, and compose comprehensible notes. Extensive research highlights the advantages of digital note-taking, such as improved organization, searchability, and accessibility of notes [3]. Furthermore, it has been demonstrated to foster active learning by actively engaging students with the digital medium [4]. The method provides an effective learning experience for students in the classroom as active learning is involved. The study addresses the following research inquiries the effects of digital note-taking on the students' level of academic achievement

Canva for Education is a highly effective tool for promoting visual learning and communication. It offers a user-friendly interface that simplifies the creation of visually appealing images, while also fostering users' creativity and collaboration skills. Previous studies have extensively explored the application of Canva in various domains, including its effectiveness as an infographic tool for educational materials. Notably, [5] conducted research that demonstrated the positive impact of Canva on students' understanding and engagement when using infographics as a teaching resource. Educators can swiftly generate a diverse range of innovative digital learning resources and promote project-based learning that empowers teachers to design assignments that simulate real-world challenges, particularly those centered around creativity [6].

Canva is a tool that transforms abstract concepts into tangible site maps with just a few clicks. In addition, it promotes a positive learning environment by providing readily accessible features that may affect students' concentration, memory, and disposition. When students have positive sentiments about their learning environment, they are more engaged and attentive in the learning process [7]. It empowers students to actively participate in a creative journey and retrieve their existing knowledge. [8] advises teachers to use instructional strategies that grab students' attention, encourage their active participation, and promote connections between students and teachers as well as among students themselves.

Additionally, Canva is an advantageous tool for educators, providing chances for engaging and interactive learning experiences through the creation of attractive materials. It is particularly useful for teaching functional texts like brochures, because to its user-friendly interface and versatility, which make it appropriate for a variety of subjects and competencies [9]. Besides, reading comprehension can be increased, according to research, by incorporating contextual learning and using relevant texts that are in line with students' needs and abilities. These materials were created by fusing textual information with interactive learning and pupil participation [10].

The significance of utilizing the critical literacy approach when analyzing canvas technologies, particularly business model canvases. By cultivating this skill, educators can empower students to generate innovative business ideas that contribute positively to society [11]. However, there is a lack of thorough study on the application of critical literacy to the analysis of business models that employ canvas technology. Teachers can assist students in creating original business solutions that have a positive impact on society by incorporating critical literacy skills into the analysis of canvas technologies. The Canva application is commended for its ability to foster creativity, enhance student engagement, and facilitate language learning in the classroom [12]. Further study is required to explore instructional approaches, evaluate their effects on students' comprehension of business, and investigate the possible advantages of encouraging students to think critically and with an entrepreneurial attitude in order to close this research gap.

Likewise, in today's context, technology possesses immense potential for enhancing education, especially in the context of distance learning. However, it is essential to recognize the enduring significance of the teacher-student relationship, with technology serving as an aid rather than a replacement for instructors. Recent research highlights the widespread adoption of digital note-taking among students and the need to explore alternative strategies [13]. While many students prefer technology-based approaches, there is no significant preference between technology-based and traditional strategies among those who use both. Similarly, Canva has the capacity to enhance learning by creating visually appealing educational resources [14].

Nevertheless, CANVA's effectiveness and acceptance are influenced by factors such as teachers' technological proficiency and the availability of alternative resources. Further research is necessary to gain a comprehensive understanding of the impact of Canva on learning outcomes [15]. The utilization of Canva as a platform for note preparation and sharing has been limited, especially in terms of its potential to enhance the learning experience. While Canva has been extensively studied in various contexts, its specific application for note-taking purposes has received minimal attention. This research gap underscores the importance of conducting a study that examines the effects of Canva on students' performance in note-taking, comparing it to alternative methods that do not involve Canva.

### 1.2 Research Question

Our research aims to study the impact of digital note-taking on students' academic achievement. As well as using past articles to identify solutions. Hence, our main research question are:

*“What are the students' perspectives on the integration of CANVA for an effective learning experience?”*

*“To what extent do students prefer CANVA over other digital tools such as Microsoft PowerPoint for creating comprehensive and visually appealing notes?”*

*“How does using Canva as a platform for note preparation and sharing compare to alternative methods in terms of students' note-taking performance and learning experience?”*

### 1.3 Research Objectives

Our study objectives are as follows:

- (i) Assess student's perspectives on the integration of CANVA for an effective learning experience.
- (ii) Investigate the preference of students for CANVA over other digital tools such as Microsoft PowerPoint for creating comprehensive and visually appealing notes.
- (iii) Compare the effects of using Canva as a platform for note preparation and sharing with alternative methods in terms of students' note-taking performance and learning experience.

## 2. Methodology

The educator provides thorough training and assistance as part of the process of carrying out Canva as digital tool for activities. The ability of the students to develop and apply the taught learning model is the result of these exercises. Additionally, thorough questionnaires with students provided feedback and evaluation data. The suggested actions for carrying out the activities are listed below:

### 2.1 Preparation of Student’s Group Activities and Rubrics (Peer Teaching & CANVA Summary Notes) By the Teaching Lecturers

The aim of this step is to identify appropriate materials consist of aspects, details of activities and the marks for the aspects achieved. A group of students for conducting the activities has been established. Material requirements are determined through coordination and input from the proponents of the activity. Five to six students per group has been established and names should be uploaded in the excel file given by the educator. Groups and members should have been decided by the first week of the lesson. Next, peer teaching has been conducted to demonstrate the application of the method through illustrative examples and to offer suggestions and highlight key considerations to keep in mind when utilizing the method. Additionally, to provide CANVA digital notes with several topics consisting of:

- i. Simplex – maximization (linear programming)
- ii. Simplex – minimization (linear programming)
- iii. Simplex – mixed constraint case (linear programming)
- iv. Branch and Bound method (integer programming)
- v. Newton’s method + Direct Substitution (non-linear programming)
- vi. Generalized reduced gradient method (non-linear programming)
- vii. Language function (non-linear programming)

Rubric for teaching marking and CANVA digital notes marking are shown in Figure 1 and Figure 2 below:

Aspect	Details	Marks
Comprehensive Presentation	• Provide explanation with examples	1 (fair) – 5 (excellent)
	• Explain in detail how to use the method	1 (fair) – 5 (excellent)
	• Provide tips and know-how on how to understand the method	1 (fair) – 5 (excellent)
Presentation style	• Easy to understand	1 (fair) – 5 (excellent)
	• Confident and eloquent	1 (fair) – 5 (excellent)
	• Able to answer question given	1 (fair) – 5 (excellent)
CANVA Digital Notes	<ul style="list-style-type: none"> <li>• Effective Design (effective use of colours, fonts and layout; clear and organized visual)</li> <li>• Content</li> </ul>	
Marks will be given by:		
✓ Course Lecturer	• Total marks	30

Fig. 1. Peer teaching marking rubric

Aspect	Details	Marks
Effective Design	• Effective use of <u>colours</u> , fonts and layout	1 (fair) – 5 (excellent)
	• Clear and organized visual	1 (fair) – 5 (excellent)
Content	• Accuracy and relevance of information	1 (fair) – 5 (excellent)
	• Cover all the info	1 (fair) – 5 (excellent)
Creativity	• Uniqueness and originality of the design	1 (fair) – 5 (excellent)
	• Innovative/creative approaches to present the info	1 (fair) – 5 (excellent)
Total marks		30

Fig. 2. CANVA digital notes marking rubric

### 2.1 Dissemination of Information and Instructions to The Students

The steps to join CANVA classroom to create peer teaching summary notes have been elaborated by the educator. The steps involved are depicted in Figure 3.

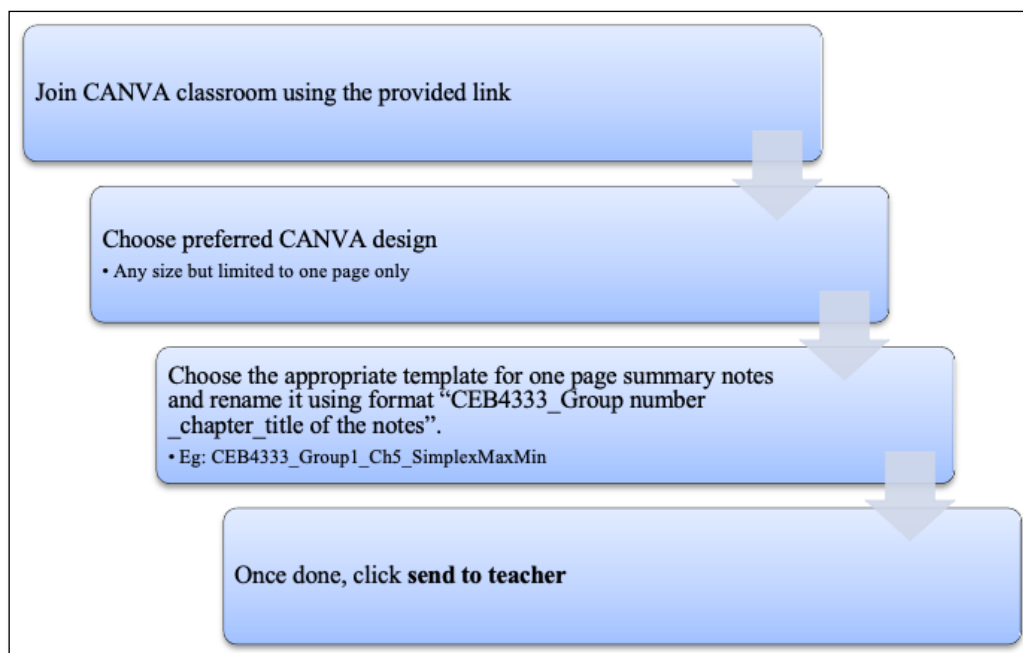


Fig. 3. Steps to join CANVA classroom for peer teaching summary notes

### 2.2 Sharing and Teaching Materials and Modules to Students

The weekly teaching materials have been posted on students’ learning portal or *ULearn*, as reference for to create the summary notes based on the given topic as shown in Figure 4.

### 2.3 Students to join CANVA link and prepare the teaching slides and summary notes using CANVA

As shown in Figure 5, once the students completed establishing summary notes and teaching slides, students are required to upload their materials on the CANVA link prepared by the educator.

## 2.4 Implementation of Activities during Lesson

Figure 6 shows students presented summary notes based on their findings from the topic using CANVA as a medium of presentation in class.



Fig. 4. Teaching material and Modules as reference summary notes taking

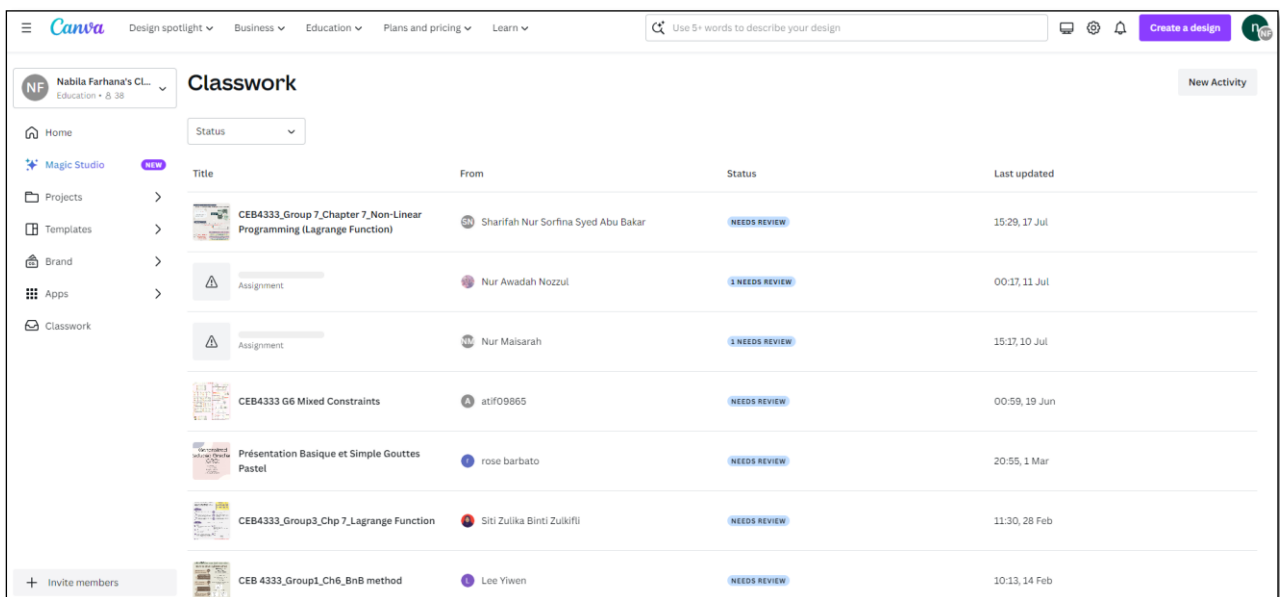


Fig. 5. CANVA link to gather teaching slides and summary notes by students

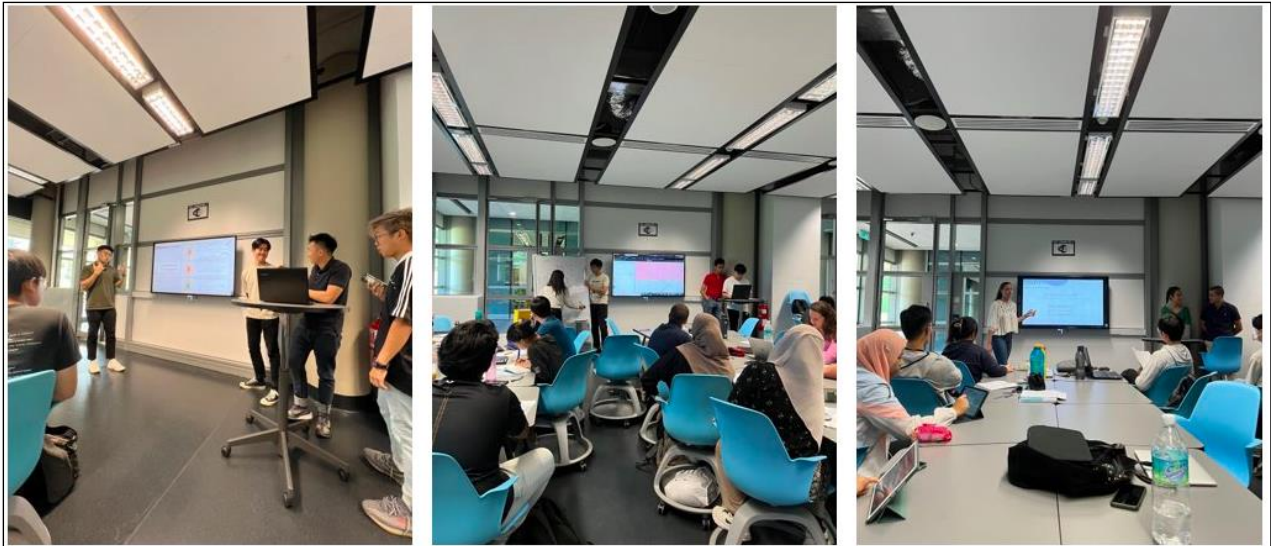


Fig. 6. Presentation of assigned subtopic and summary notes prepared by students using CANVA

### 3. Results and Discussion

Groups of students have participated in class activities where CANVA is utilized. By letting the students create a range of digital content with Canva for Education, educators able to promote digital literacy in their students. Data has been collected from a survey responded to by a group of 16 students regarding the use of Canva as a learning medium in the classroom. Every student has responded with a YES when asked if Canva has been used for any purpose before. This proves that the utilization of Canva as an application to accomplish tasks is not uncommon among students in this digital era. Based on the obtained responses in Figure 7, 56.3% of the students were familiar with Canva before the class activity, while 37.5% of the students had some familiarity as they had used the application a few times prior to the activity. Meanwhile, 6.3% (equivalent to one student) responded that they were not familiar with Canva and had not used the application for any activities.

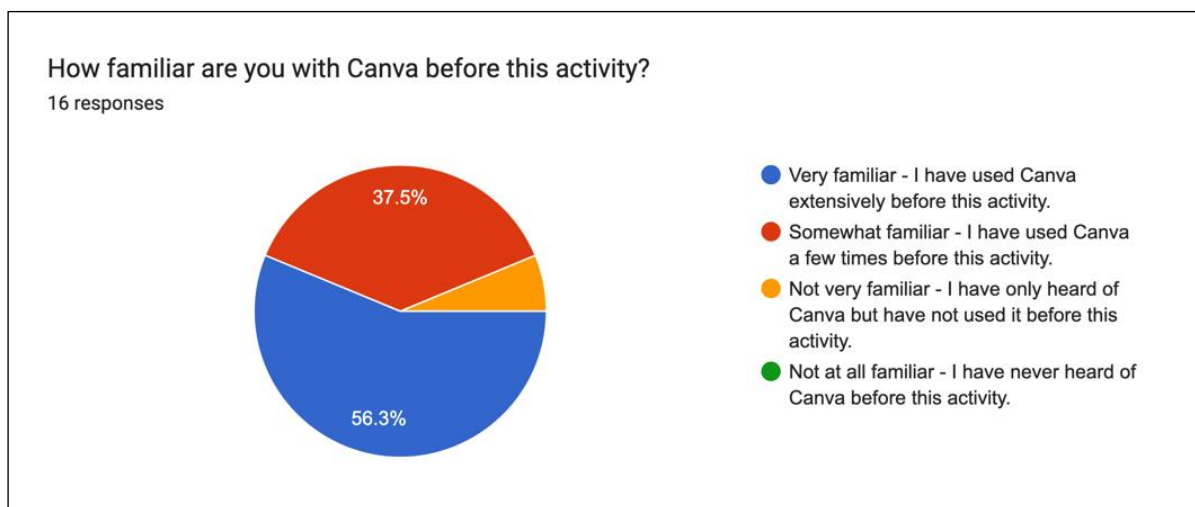


Fig. 7. A pie chart presented the familiarity of Canva before this activity

Contrary to the previous findings regarding Canva, Figure 8 reveals a different trend when comparing it to the use of Microsoft PowerPoint. Out of the 16 students, 14 students indicated that they are highly familiar with Microsoft PowerPoint and have extensively used the application prior to the class activity, while the remaining two students have some familiarity, having used the application a few times before the activity. This proves that Microsoft PowerPoint is more widely recognized among students compared to Canva, likely due to the longevity of Microsoft applications in the technology sector. Therefore, a follow-up survey was conducted to investigate the effectiveness of Canva and Microsoft PowerPoint as learning tools during class activities. Based on Figure 9, 11 out of 16 students expressed a preference for Canva over Microsoft PowerPoint, citing its user-friendly nature for creating visually appealing and comprehensive notes as per stated by [3], Canva acts as a portal to the larger world outside of the language classroom, offering a rich collection of authentic visual media that is easily accessible.

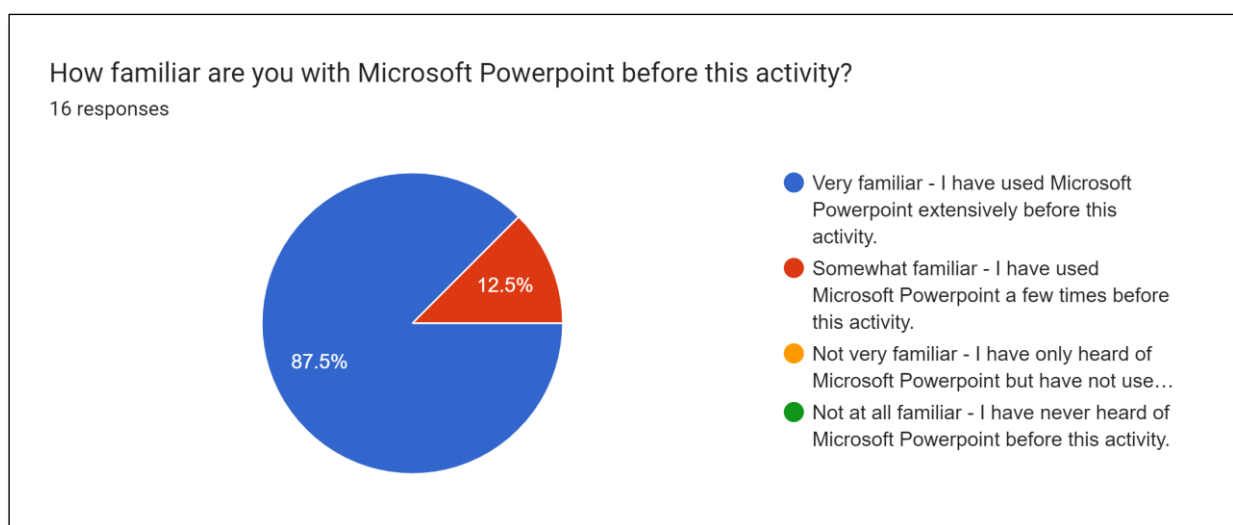


Fig. 8. A pie chart presented the familiarity of Microsoft Powerpoint before this activity

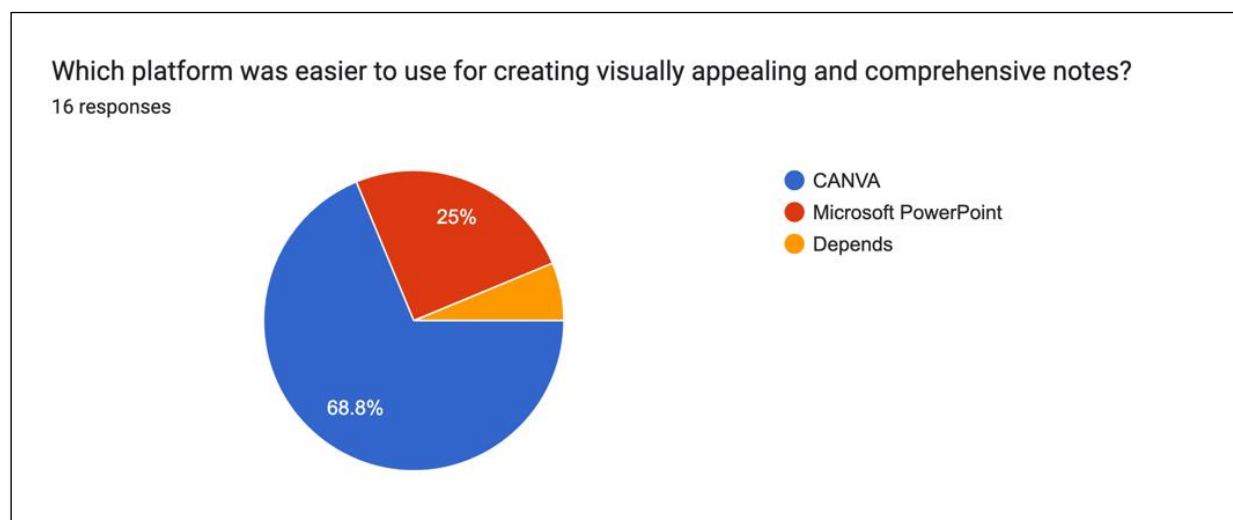
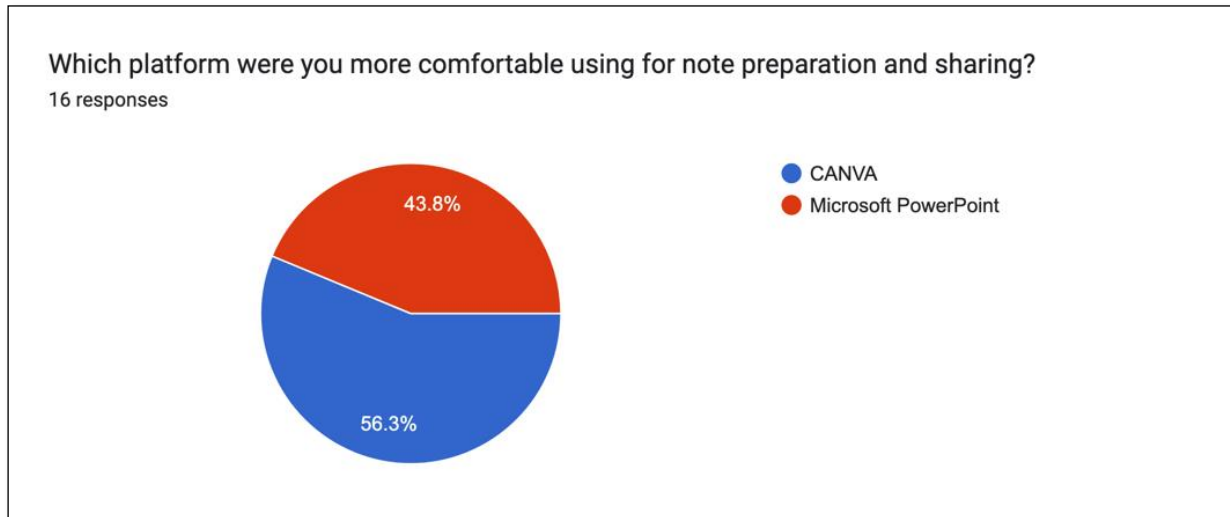


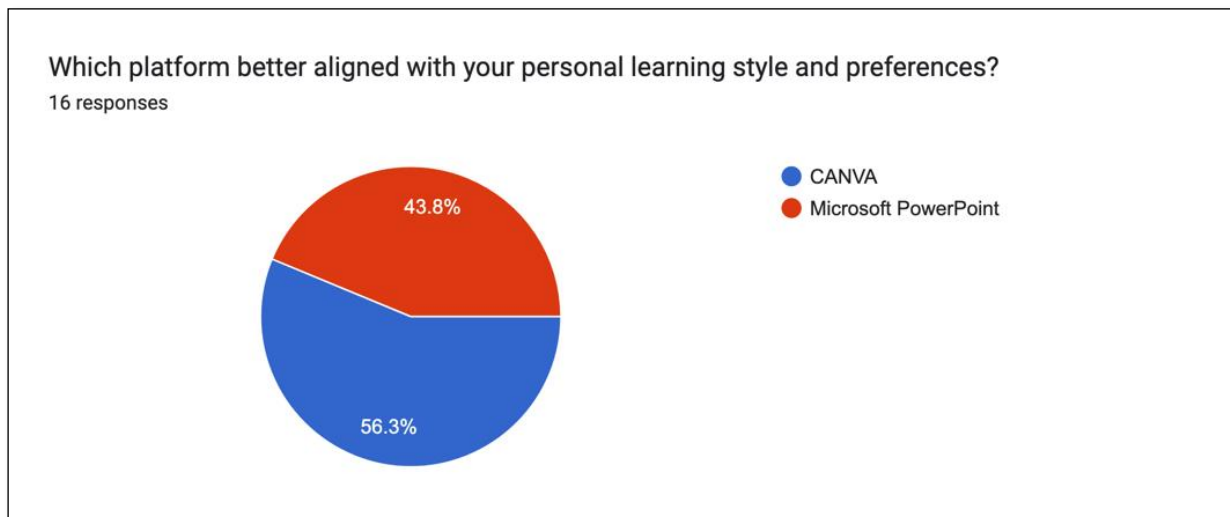
Fig. 9. A pie chart presented the convenience utilization between two applications



The collected data also revealed that 9 out of the 16 students agreed that CANVA offers greater convenience in terms of preparation and sharing, aligning with their learning styles and preferences, as demonstrated in Figure 10 and 11. This is supported by a study conducted [3], which highlighted that digital mediums like CANVA provide a learning experience that resonates with students' digital-native qualities. Visual media, in particular, aids students in effective communication and creative expression, thereby enhancing their understanding and engagement in the learning process.



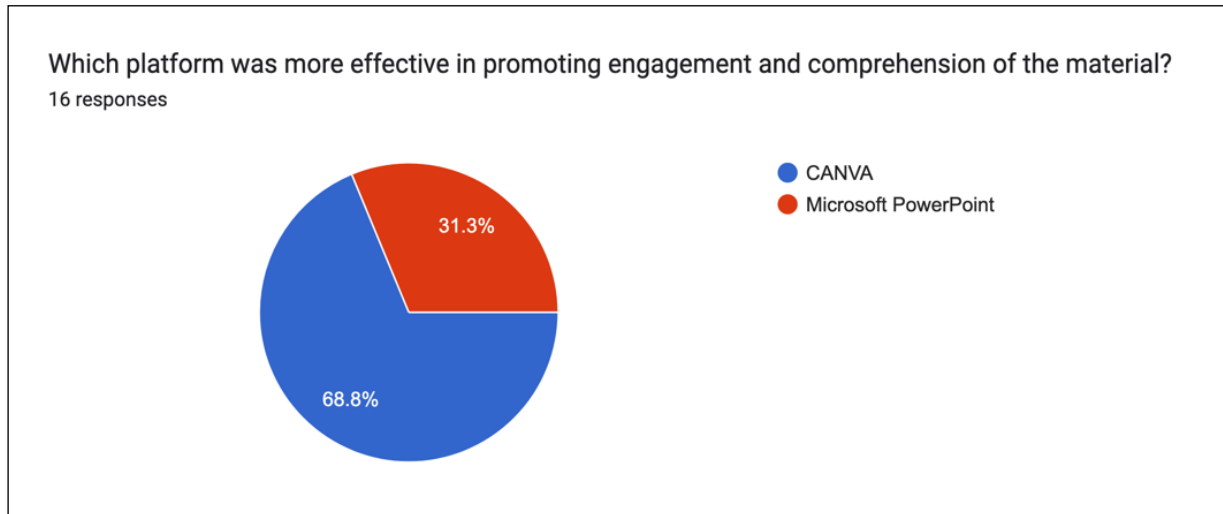
**Fig. 10.** A pie chart presents the comfortability in utilization between two applications for note preparation and sharing



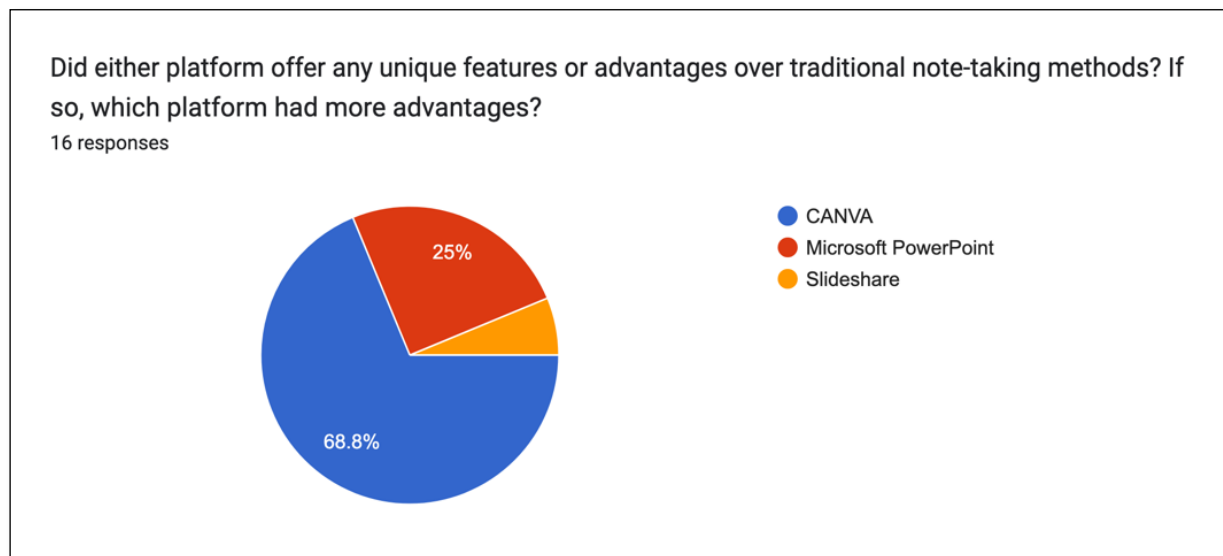
**Fig. 11.** A pie chart presented which of two applications align with personal learning style and preferences

Recognizing the fast-paced and unpredictable nature of the contemporary world is of utmost importance. Students must receive instruction on how to consistently adapt and respond to these changes. Educators play a crucial role as facilitators of learning by promoting and facilitating these adaptations through the use of learning multimedia that resonates with the digital-native qualities of students. A survey was conducted, and the results indicated that students agree that CANVA, as a platform, is more effective in promoting engagement and comprehension of material during the

learning experience in class activities. Out of the 16 students surveyed, 11 preferred Canva as a tool that offers unique features and advantages compared to traditional note-taking methods, which can enhance cognitive development during class activities. Figure 12 and Figure 13 depict that students choose Canva as a digital tool for an effective learning experience.



**Fig. 12.** A pie chart presented which of the two applications more effective in promoting engagement and comprehension of the material



**Fig. 13.** A pie chart presented which of applications offer unique features or advantages over note-taking methods

Based on the results, the study highlights the positive impact of digital note-taking using CANVA on student's academic achievement levels. The increased engagement and comprehension reported by students during class activities indicate that CANVA facilitates a more interactive and immersive learning experience. These findings align with previous research on the benefits of multimedia tools compared to conventional methods in education [3],[4].The preference for CANVA over Microsoft PowerPoint suggests that CANVA's user-friendly interface and vast range of design options make it a more effective tool for creating comprehensive and visually appealing notes. This finding adds to the

existing literature on the importance of visual aids in enhancing students understanding and retention of information [5,6].

Additionally, the convenience of note preparation and sharing offered by CANVA aligns with the growing emphasis on collaboration and digital connectivity in today's educational landscape. The ability to easily access and share digital notes can enhance student collaboration, facilitate peer learning, and provide students with a valuable resource for review and revision. These findings contribute to the body of knowledge on the integration of digital tools in education and provide valuable insights for educators and researchers alike. By highlighting the benefits of CANVA as a digital note-taking and teaching tool, this study encourages the adoption of innovative, interactive approaches to enhance students' learning experiences and outcomes. Further research should explore the long-term effects of incorporating CANVA in different educational settings and subject areas to gain a comprehensive understanding of its potential benefits.

#### 4. Conclusions

To examine the impact of using CANVA for digital note-taking and teaching slides on students' learning experience and knowledge acquisition, a group of students participated in learning activities that incorporated CANVA as a medium. CANVA was used to create visually appealing and comprehensive notes and teaching materials for the given topics. After analysing the experimental data, it was found that the majority of students became familiar with the utilization of CANVA and its purposes. Students expressed a preference for CANVA over Microsoft PowerPoint, citing its user-friendly nature and its ability to facilitate effective knowledge acquisition. Additionally, the study found that CANVA enhanced engagement and comprehension of the material. By involving students in the preparation and sharing of summary notes and teaching slides aligned with their learning styles and preferences, CANVA helped them grasp the context and understand the specific knowledge areas that needed focus. This study revealed that cognitive development during class activities contributed to positive learning outcomes and experiences for the students. Utilizing a digital tool like CANVA for note-taking and teaching slides proved to be effective in enhancing learning during classroom activities.

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